FIG. 1

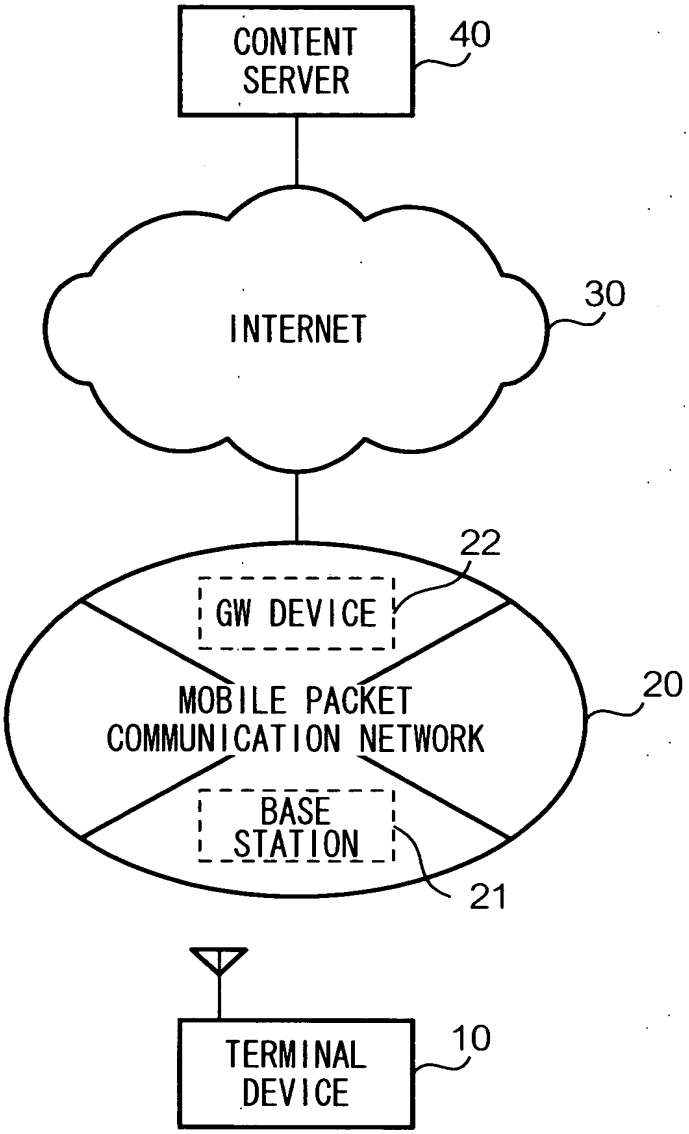


FIG. 2

TELEPHONE NUMBER	CALLED PARTY IDENTIFIER
090AAAAAAAA	AAAA
090BBBBBBBB	BBBB
090CCCCCCCC	CCCC

FIG. 3

INCOMING TELEPHONE NUMBER
090XXXXXXXX
090YYYYYYYY
090CCCCCCCC

FIG. 4

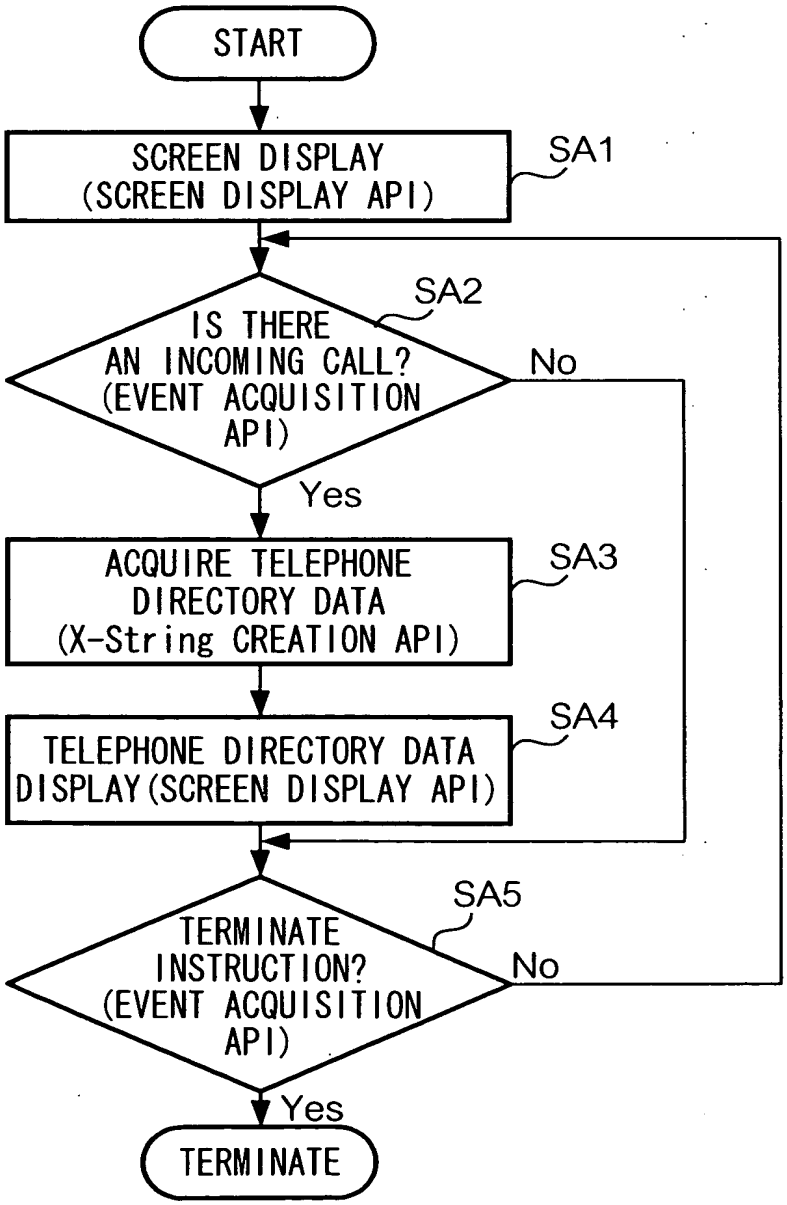


FIG. 5

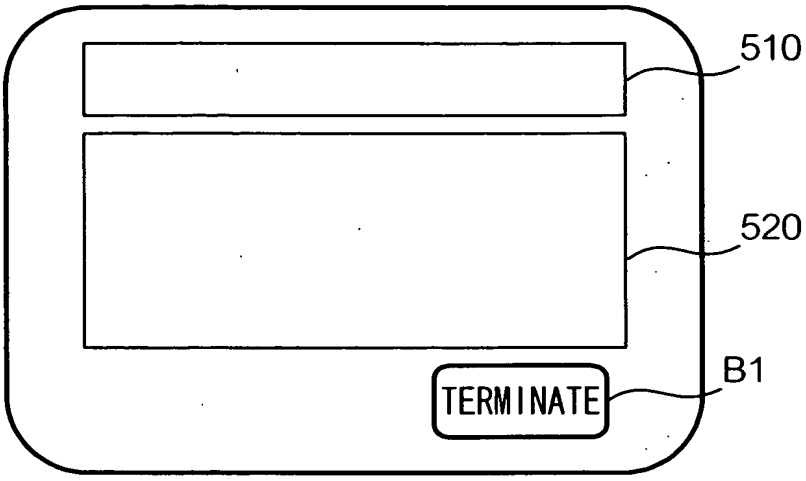

510
520
B1
TERMINATE

FIG. 6

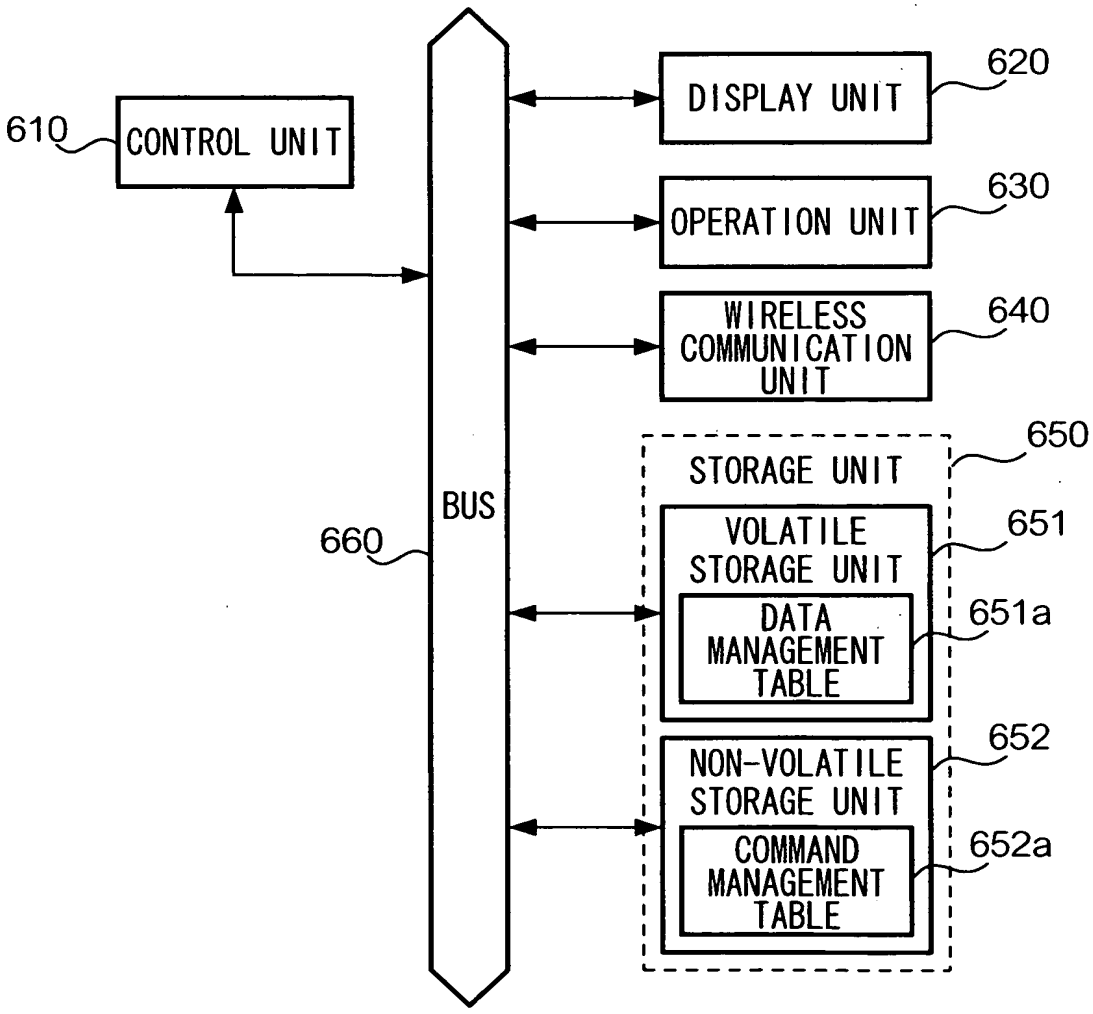

610
CONTROL UNIT
BUS
660
DISPLAY UNIT
620
OPERATION UNIT
630
WIRELESS COMMUNICATION UNIT
640
650
STORAGE UNIT
VOLATILE STORAGE UNIT
651
DATA MANAGEMENT TABLE
651a
NON-VOLATILE STORAGE UNIT
652
COMMAND MANAGEMENT TABLE
652a

FIG. 7

651a

REFERENCE DATA	PROTECT FLAG
0x01 (X-String ADDRESS)	1

FIG. 8

652a

API IDENTIFIER
SCRATCHPAD API
NETWORKING API

FIG. 9

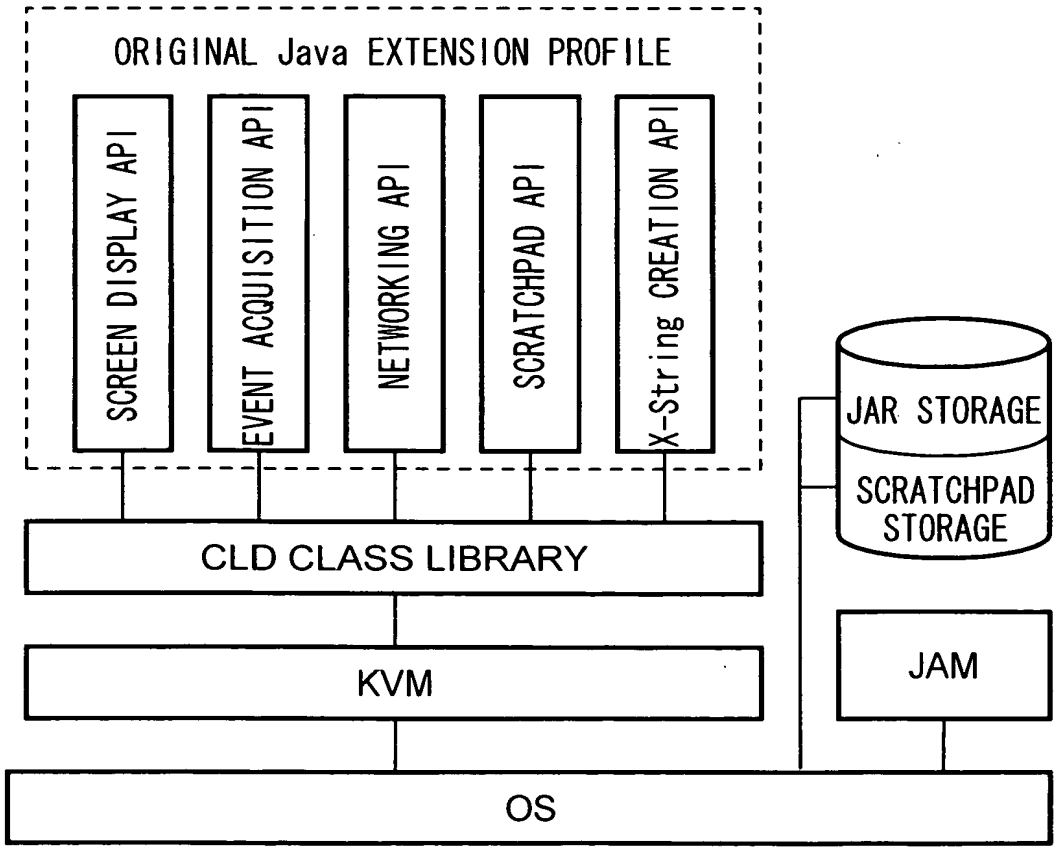


FIG. 10

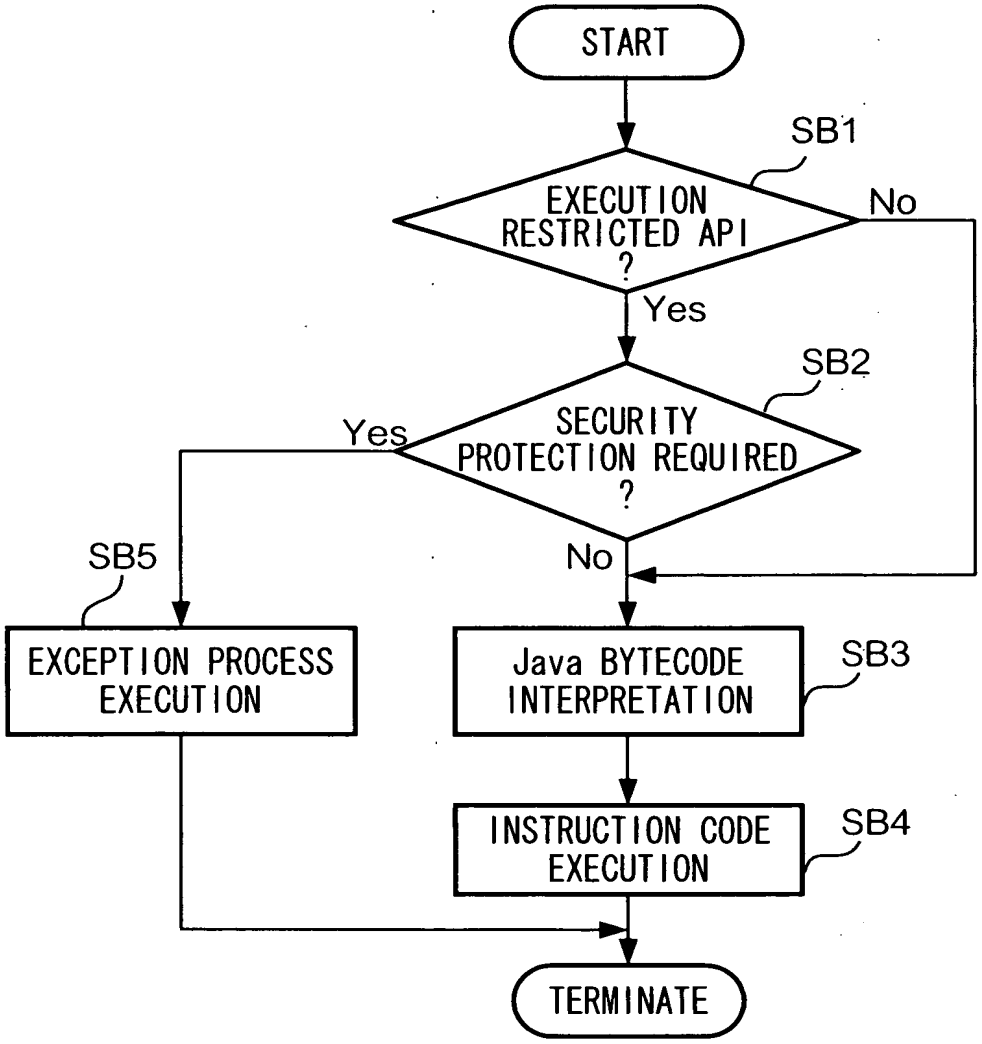

START
SB1
EXECUTION RESTRICTED API ?
No
Yes
SB2
SECURITY PROTECTION REQUIRED ?
Yes
No
SB5
EXCEPTION PROCESS EXECUTION
Java BYTECODE INTERPRETATION
SB3
INSTRUCTION CODE EXECUTION
SB4
TERMINATE

FIG. 11

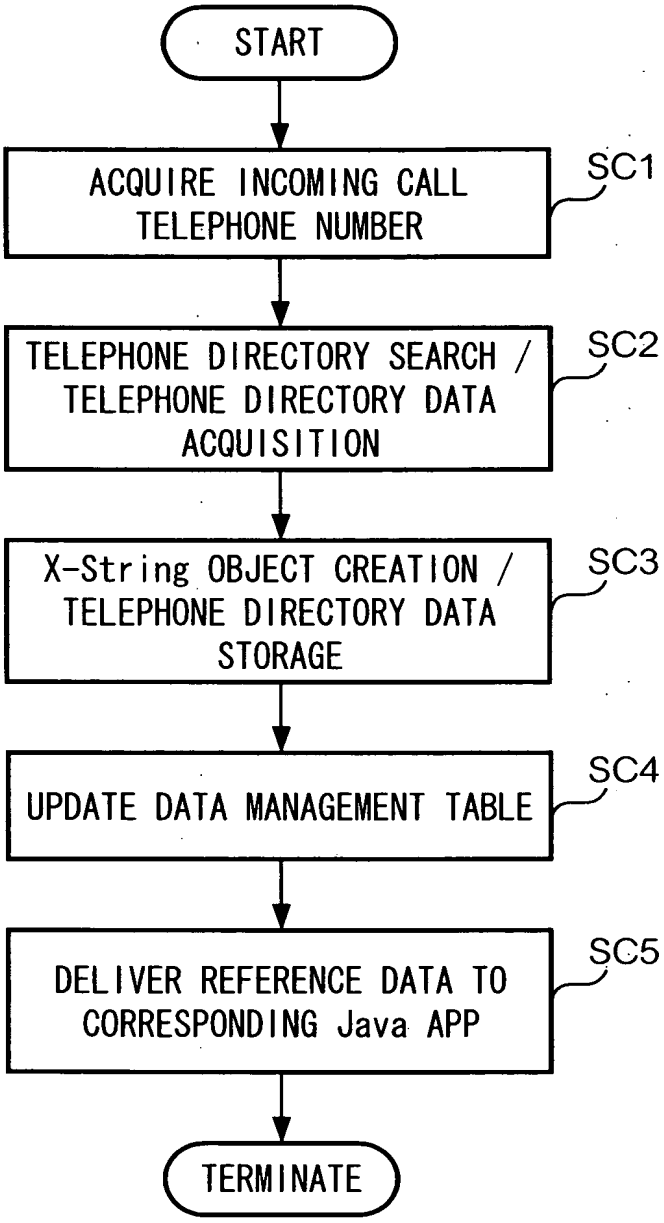

START
ACQUIRE INCOMING CALL TELEPHONE NUMBER
SC1
TELEPHONE DIRECTORY SEARCH / TELEPHONE DIRECTORY DATA ACQUISITION
SC2
X-String OBJECT CREATION / TELEPHONE DIRECTORY DATA STORAGE
SC3
UPDATE DATA MANAGEMENT TABLE
SC4
DELIVER REFERENCE DATA TO CORRESPONDING Java APP
SC5
TERMINATE

FIG. 12

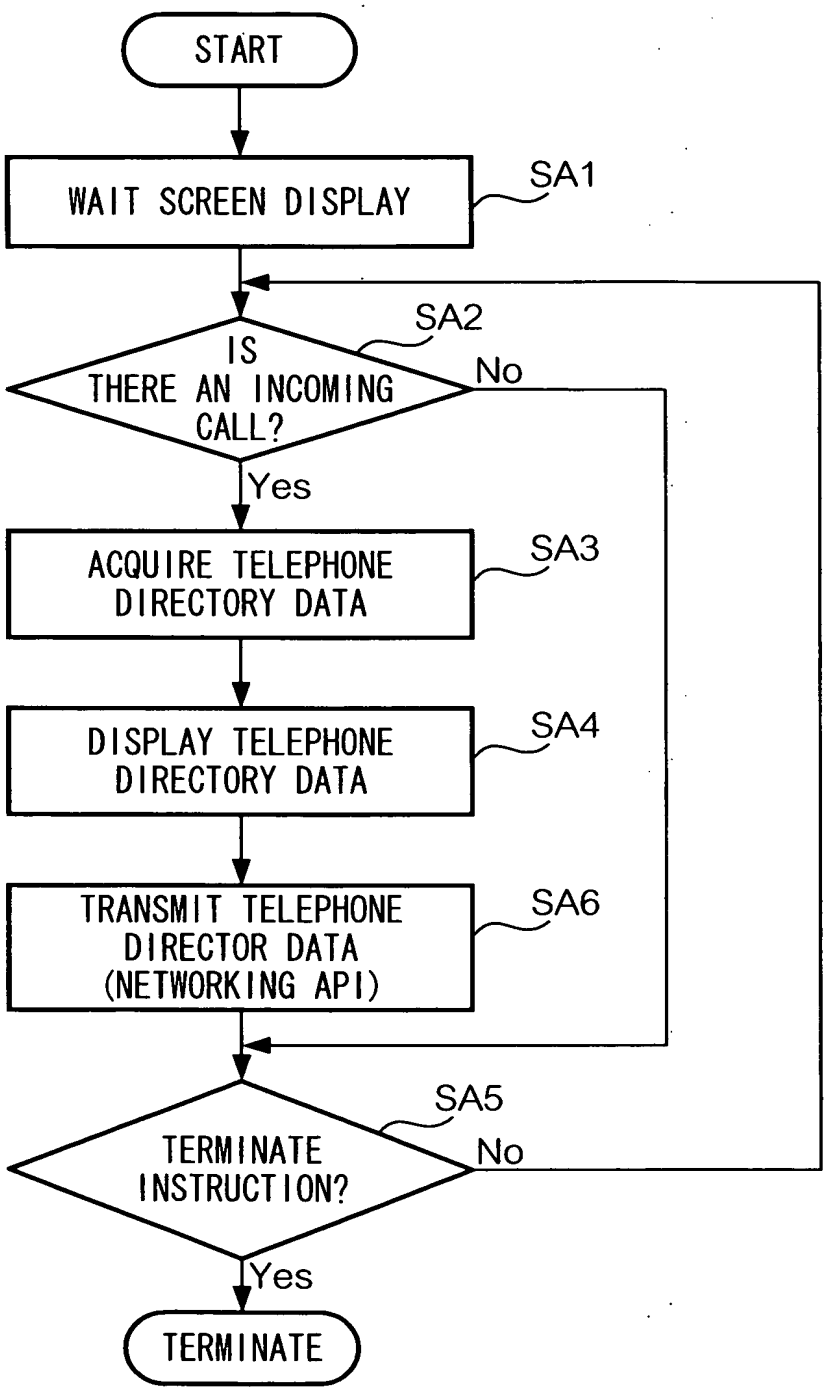

START
WAIT SCREEN DISPLAY
SA1
IS THERE AN INCOMING CALL?
SA2
No
Yes
ACQUIRE TELEPHONE DIRECTORY DATA
SA3
DISPLAY TELEPHONE DIRECTORY DATA
SA4
TRANSMIT TELEPHONE DIRECTOR DATA (NETWORKING API)
SA6
TERMINATE INSTRUCTION?
SA5
No
Yes
TERMINATE

FIG. 13

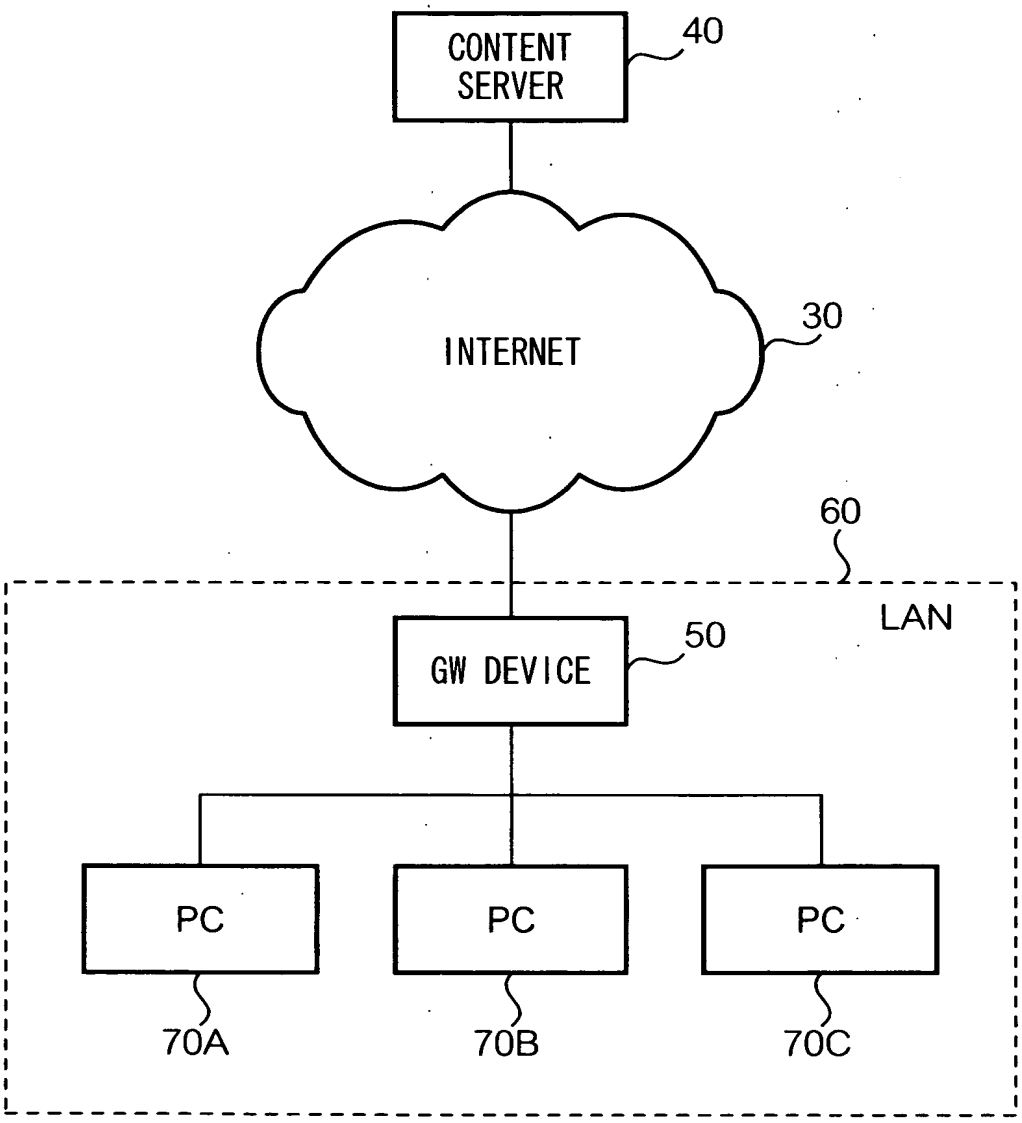
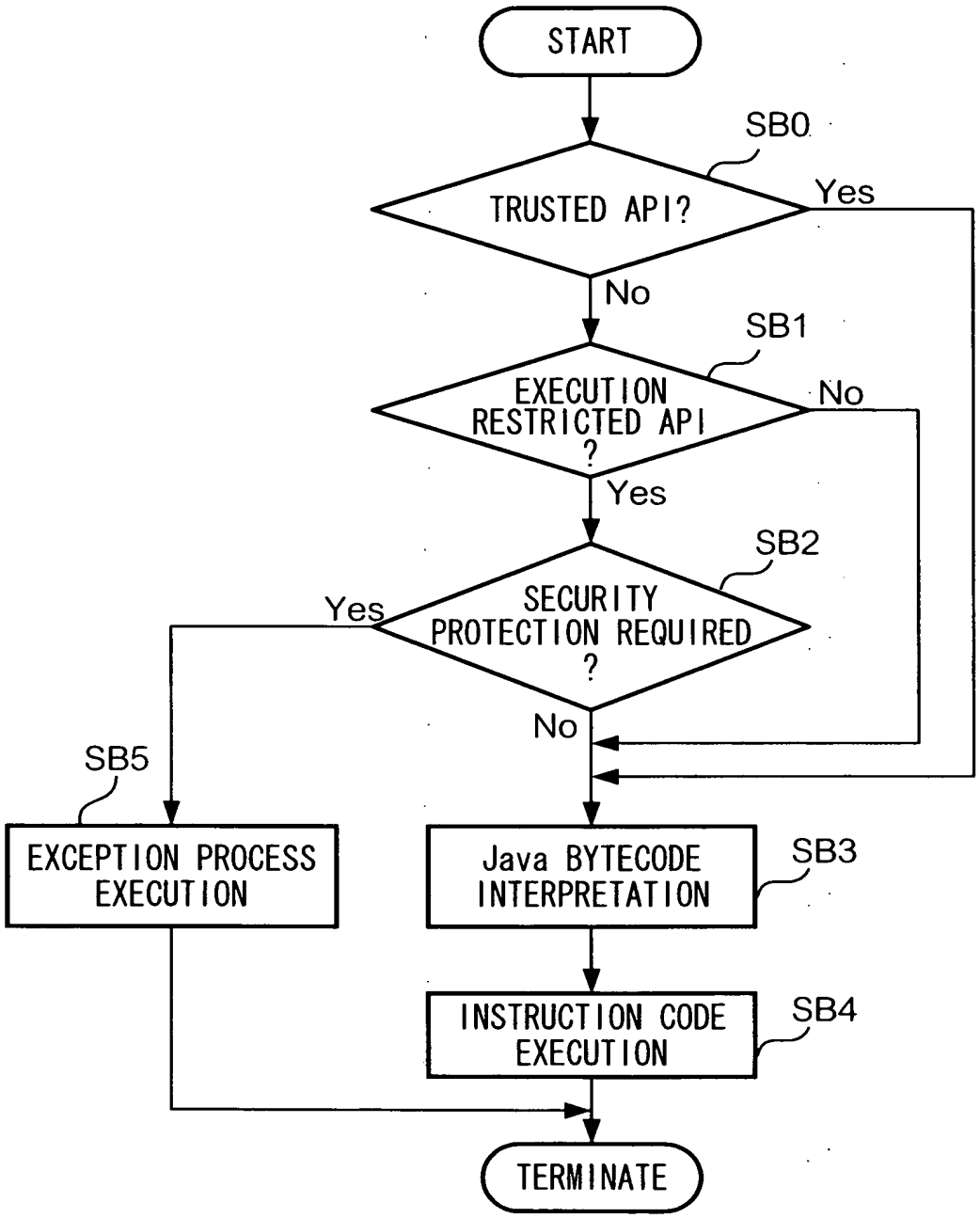

CONTENT SERVER
40
INTERNET
30
60
LAN
GW DEVICE
50
PC
PC
PC
70A
70B
70C

FIG. 14


START
SB0
TRUSTED API?
Yes
No
SB1
EXECUTION RESTRICTED API ?
No
Yes
SB2
SECURITY PROTECTION REQUIRED ?
Yes
No
SB5
EXCEPTION PROCESS EXECUTION
Java BYTECODE INTERPRETATION
SB3
INSTRUCTION CODE EXECUTION
SB4
TERMINATE